

REMARKS

This application has been amended in a manner to place it in condition for allowance at the time of the next Official Action.

Claims 12 and 19 are amended.

Claims 20 and 21 are new.

Support for the amendment may be found, for example, in the paragraph bridging pages 7 and 8, the last full paragraph of specification page 8, and Figure 6B.

Claims 12-21 remain pending in the application.

Claims 12-19 are rejected under 35 U.S.C. §103(a) as being unpatentable over SCHULZ EP 0344056 A2 ("SCHULZ"). Applicants respectfully traverse the rejection.

The Official Action recognizes that SCHULZ fails to disclose the D, L, and H values of the claimed invention.

The position of the Official Action is that the value of D would have been readily determined through routine experimentation depending on the desired result. Reference is made to MPEP 2144.05 II.

However, there is no recognition in SCHULZ that a change in the displacement distance of the embossing protrusions in two opposing plies increases bulk or thickness of the plies, e.g., where at each protrusion, or at least 25% to 100% of each protrusion, of one ply is over an unembossed area of the other ply as recited in claims 12 and 19-21.

To the contrary, SCHULZ simply discloses that the displacement results in a prevention of nesting of the embossing protrusions, while thickness is essentially the same as without displacement. Additionally, figure 3 of SCHULZ appears to suggest that protrusions and patterns of one ply are opposite protrusions and patterns of the other ply. While SCHULZ discloses that the displacement may be adjusted, this is for the purpose of precluding nesting for different embossing patterns. See, e.g., column 3, lines 19-65.

A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

Thus, the Official Action has not established *prima facie* obviousness, as there is no evidence of record to suggest that the value of D would have been readily determined through routine experimentation depending on the desired result.

Moreover, SCHULZ fails to recognize the benefits of selecting the recite displacement D and increased bulk/thickness of the claimed invention. Table 1 of the present specification demonstrates that one benefit of the claimed invention is that fewer paper sheets are required to form a tissue paper roll of the conventional diameter and firmness. Consequently, this provides a

savings for the manufacturer. See, page 11, first and second paragraphs, in view of Table 1 on page 10 of the present specification.

SCHULZ is not concerned with reducing the number sheets per roll by displacing, as SCHULZ obtains paper that is essentially the same thickness as a conventional embossed sheet.

In responding to the previously filed amendment, the Official Action makes three statements in support of the obviousness rejection:

I. The SCHULZ process is similar to the present invention, as the two ply tissue paper of SCHULZ is made embossing, separating, displacing and recombining.

However, the resulting paper is different. The paper of SCHULZ has a thickness that is essentially the same as paper prior to displacement. The claimed paper includes a displacement D so that each protrusion is opposite an unembossed area, or at least 25% to 100% of each protrusion of one ply is over an unembossed area of the other ply, as recited in independent claims 12, 19, and 20. As a result, the claimed paper has a greater thickness or bulk than that disclosed by SCHULZ.

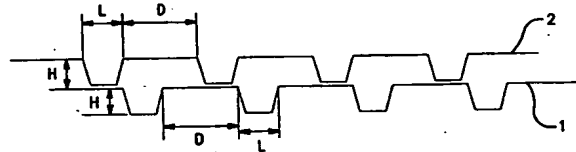
This difference in the thickness may be illustrated, for example, by Figures 6A and 6B of the present specification. Figure 6A illustrates an embossed two ply tissue paper that has a thickness of a two ply paper that not been separated and rejoined, i.e., the thickness is that of approximately the height of the

embossing protrusions, "H". Figure 6B, which exemplifies a two-ply paper according the claimed invention with an arrangement of protrusions over unembossed areas, shows a thickness that is greater than "H", e.g., two times "H":

FIGURE 6A



FIGURE 6B



Thus, SCHULZ would have a thickness essentially the same as Figure 6A, which is not the same of the claimed invention.

II. The two plies of SCHULZ are displaced relative to one another by an amount sufficient to prevent nesting of the embossments.

Both the present application and SCHULZ disclose sufficient displacement to prevent nesting. An important difference is that SCHULZ solely obtains a thickness that is essentially the same as that of two plies prior to displacement. Thus, the prevention of "nesting", especially in view of SCHULZ as a whole, fails to suggest an increase in thickness or bulk as recited or any specific overlapping of protrusions and unembossed areas as recited.

III. The method of SCHULZ results in enhanced bulk and softness.

SCHULZ discloses that embossing enhances bulk, softness and absorbency of two-ply tissues (column 1, lines 22-25 and

column 2, lines 45-50). SCHULZ does not disclose that the displacement of the plies enhances or increases the bulk, thickness or softness. Indeed, the thickness is essentially the same as before displacement.

Therefore, in view of the above, SCHULZ cannot render obvious independent claims 12, 19 and 20 and dependent claims 13-18 and 21, and withdrawal of the rejection is respectfully requested.

In view of the amendment to the claims and the foregoing remarks, the present application is in condition for allowance at the time of the next Official Action. Allowance and passage to issue on that basis is respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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